

AMERICAN FARMER.

RURAL ECONOMY, INTERNAL IMPROVEMENTS, PRICE CURRENT.

"O fortunatos nimium sua si bona norint
Agricolae." VIRG.

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AGRICULTURE.

HEMP.

In compliance with the wishes of a correspondent, expressed in a late number of the Farmer, we have collected several papers on the culture of HEMP. The subject is an important one, and will become more obviously so, as the demand increases under the favor shown by the Navy Commissioners to the domestic manufacture of sail-cloth. As the knowledge of the culture and management of Hemp spreads through the country—so will its capacity to produce it, be developed and understood. [Edit. Am. Farm.]

FROM THE RICHMOND ENQUIRER.

The Agricultural Society of Richmond having received some valuable communications from very respectable correspondents, the benefit of which they are desirous of extending, as quickly and as diffusedly as possible, amongst their Agricultural brethren, have directed a publication in your paper of the following:

1. The copy of a letter from W. C. Nicholas, of Albemarle, to Mr. Rodman, of North-Carolina, concerning the culture of HEMP, communicated by Mr. Nicholas, addressed under cover to the Society.

2. A letter from T. S. Slaughter, of Culpepper, to the Secretary, conveying an answer to certain queries lately proposed by the Society.

3. A communication from Theo. Armistead, of Norfolk, relative to the preparation of TANNIN for exportation, a new subject of rural economy, particularly interesting to the Farmers of the middle country.

NO. 1.

MAY 4th, 1811.

SIR,

Your favour of the 24th March was received by the last mail. Your application to me for instructions respecting the cultivation of Hemp, required no apology. The little success I have myself experienced, is due to the kindness of those to whom I applied for information when I began the culture.—This imposes on me the obligation of imparting to others what was so liberally communicated to myself. Another motive, of itself irresistible, is my earnest desire to promote the prosperity of my country, to which, I presume, nothing can more contribute than varying the useful products of our soil, so as to prevent the consequences which would necessarily flow from confining the agricultural labor of the country, to the production of a few articles. Hemp has strong recommendations; it is, intrinsically, worth as much as cotton—is applicable to most of the uses to which cotton can be applied, and to others for which cotton will not serve; to commerce it is indispensable; and is the material of the manufacture, best suited to our wants, and to our population. When imported, hemp must be paid for with money, as it is the product of countries exclusively agricultural, which take none of our productions in exchange. Its bulk, and the distance of the countries whence it is brought, renders the expenses of transportation almost equal to the prime cost. It does not impoverish land, nor does it interfere with any of the crops we cultivate, except Tobacco. Hemp is sown before corn is planted, and is not pulled until the corn no longer requires cultivation; it needs no attention at the periods when wheat demands the labor of the farm, either for sowing, harvesting or threshing. From these re-

marks you will learn my opinion of the value of the hemp crop, in its relation to political as well as rural economy. The interference of public duties, and ill health, have prevented me from giving so much attention to this culture, during the short period I have been engaged in it, as I could have wished, and I regret that my information will not, therefore be so ample and satisfactory as I desire.

I am inclined to believe that your climate is not the most suitable to hemp; the plant may grow as large, and perhaps larger than in higher latitudes, but I expect that the bark will be lighter and coarser. My residence is twenty miles East of the Blue Ridge, and I doubt whether it would be possible with the same management, to make as good hemp at this place as could be made West of the Allegany. It is true that Hemp is made in considerable quantities, in Spain and Italy, but as the most maritime and commercial nations of Europe derive their supplies from Russia, I conclude that the Northern hemp must be best.

I will now answer, with as much fulness as I can, your inquiries.—Question 1st. What is the kind and quality of soil most proper for hemp? Answer—A dark rich loam. I have not found land in which either sand or clay predominates, very favorable for hemp. On rich sandy land, the hemp grows to a great height, but the bark is coarse and light. On stiff clay I have never seen the hemp tall enough to yield a great crop. The plant depends chiefly on a long tap root, furnished with a few fibrous roots, the tap root penetrates to a considerable depth, and consequently requires a deep soft soil, and deep and thorough cultivation. 2d Question—Whether its being wet is an advantage or disadvantage?—Answer—I learned very early that wet land did not suit hemp, and my experience confirms the fact; so entire is the conviction in this point, where both hemp and flax are cultivated, that "Flax in the water and hemp in the fire" has become an agricultural adage. —3d. At what time is it best to sow hemp seed, and whether it would answer to sow in the fall as I have been informed has been done in Virginia?—The usual time of sowing west of the mountains, whence I obtained all the information I possess, excepting what I have acquired by the practice of three years, is from the 15th of April to the 10th May. The month of April is, there, esteemed the best time for sowing, and in that climate it may be, but in this part of the country, the month of March is preferable. The best crops I have made were sown in March. Last year the early sowing was considered the worst hemp until the crop was broken, when it appeared that the bark of the late sown was lighter, although the hemp was taller. The spring of 1810 was more unfavourable to spring crops than we have ever known, our land was never wet from the 1st May until the 20th June, and if after such a season, early sown hemp proved better than late sown—its superiority in common years will not be questioned. The advantages of early sowing are not confined to the single circumstance of producing superior bark, but by having an early growth, it smothers the other plants and weeds, and before the sun becomes very powerful, covers the ground, shades it, and preserves its moisture. I have never known hemp seed to be sown in the fall, and am, therefore, unable to say whether it would answer or not, but in sowing early land that had been in hemp the preceding year, I have always found some volunteer hemp of considerable height which must have sprung from seed accidentally scattered the fall before. Of this I am certain, that hemp is a very hardy plant, and that frost, to kill it, must be very severe. I cannot, however, assert that it would stand

the winter, but am persuaded that if it would, the crop would be superior to a spring sown crop. My choice is to sow as early as possible, after the danger of the frost is over. I will take the liberty of adding to my answer to this query, my opinion that no plant requires the land to be more thoroughly and perfectly prepared; it should be broken at least ten or twelve inches in depth, and be loose and fine before it is sown. I effect this by trench ploughing in the fall, and plough at least twice afterwards; my last operation, previous to seeding, is to harrow the ground, in order that the seed may be sown on a surface perfectly smooth and level, which enables the seedsman to distribute it equally. I then plough it in, and in that state the land is left. When I commenced the culture, my practice was to harrow in the seed, but abandoned it on observing that the land was more apt to bake in the smooth order it was left by the harrow, than in the state which the plough leaves it. When a rain fell before the seed came up, on ground that had been harrowed, I observed a crust formed on the surface, through which the tender sprout could not penetrate, and which forced it to turn down, in that situation many plants perished. I once had a sowing of eight or ten acres, on which I knew seed enough had been put, made too thin from the cause I mention. For the same reason, hemp is more easily pulled after the plough than the harrow, land that is harrowed being found closer and harder than that on which the last operation was with the plough. Farmers differ in opinion as to the quantity of seed that ought to be sown; five pecks to the acre is, however, more generally approved of than any other quantity.—I concur with this opinion in the main, but upon old and very foul land I have sown six pecks advantageously. It appears to be universally admitted that the crop is not injured by sowing too much, that only so many plants will rise as the land will bear, and that the waste of superfluous seed is the sole loss to be apprehended. If this be true (and nothing but the concurrent assertion of all the hemp makers I have conversed with could convince me of the fact) it is certainly better, always to give too much seed, and by this you will be secured likewise from the ravages of birds, worms, &c. I never saw a thin crop of hemp that was good.

In a crop of hemp, about one half of the stalks bloom, and the other half bear the seed. And the following are the indications of its being fit to pull. The stalks of the blossom, or male hemp, turn yellow, become a good deal speckled, and drop most of their leaves, and, when the air is still, a very perceptible cloud of dust rises from the blossom stalks, and hangs over the field. When ripe the sooner it is pulled the better. As it is pulled, it is to be laid in rows as thin as possible over the land in which it grows; after being pretty well cured on the ground, it must be bound into sheaves with some of the shorter hemp, and put up in shocks open at the bottom, in which state it should remain, until sufficiently cured to be put into large stacks or ricks, when it should be removed to the land on which it is to be dew wretted. The stacks or ricks should be so constructed as to expose only the roots on the outside, and if the tops of the stacks be covered with hemp, they should be peeled the latter end of September, by which time, in most seasons, what is exposed on the tops will be half wretted; the hemp taken off should be laid apart from the rest to wret. When it is safe to house corn, and not before, the crop of hemp may be spread to wret, taking care again to separate the outside of the tops of the stacks, which will wret sooner than the hemp within the stacks. Hemp ought to be spread so thin as to cover at least three times as much ground as it grew upon. The length of time

requisite to wet hemp depends upon the weather, and it should be examined frequently. To ascertain when the hemp is sufficiently wetted, if after crushing seven or eight stalks with your hands, and holding them eighteen inches or two feet from each other, the head or stalk will shake out and separate easily from the bark, leaving it clean and entire, the process of wetting is completed. Your own observation and attention will soon make you acquainted with this part of the business, and better than can be effected by any written instruction. There is no risk; for by submitting it to the break (until you become skilful enough to judge without that trouble) you can easily provide against taking up your hemp too soon, and the frequent repetition of the same experiment will secure you from the danger of its being overdone. The precise point to aim at is, to take up the hemp at the moment when the bark or lint will separate from the stalk without being wetted or weakened. The bark or lint of hemp is connected with the stalk by a substance which must be either wetted or dissolved, before they will separate; produce the separation, and the work is accomplished.

I have been prevented, frequently, by the weather for eight or ten days in the month of March, from taking up hemp that was sufficiently wetted, and have never experienced any inconvenience from it; in cold or even cool weather, it is not easily injured by exposure. When your hemp is sufficiently wetted, take it up and put it in stacks of about 100 wt. each, tying them at the top with hemp. It should be perfectly dry when stacked. The business of the farm should be so arranged that you may commence breaking as soon as the hemp is ready, for it is subject to loss and injury, proportionate to the time you delay it.—My hemp, when broken, is baled in a box made like a cyder press, across the bottom four ropes are laid to tie the hemp when pressed into the box with a common prize.

5th Query. What are the kinds of machines for breaking, scutching or swinging hemp, and where are they made?

Answer. We use nothing but a break similar to a flax break, but larger. My breaks are six feet long, 36 inches wide at one end of the break, and twelve at the other end. With four swords in the frame, and three in the upper part of the break. With this instrument (which any person may make who can make an helve to a hoe or an axe) our hemp is broken and cleaned. With one of these a man will break, clean, and prepare for market, in one day, from 80 to 150 lbs accordingly as the order of the hemp, its quality, and the state of the weather may be more or less favorable.

6th Query. What quantity of hemp have you made to the acre?

Answer. Various quantities. When I commenced the culture, I was not only uncertain what parts, but, whether any part of my land would bring hemp; in some instances I have been sadly disappointed, and in others, agreeably surprised. My average crop from all the land I have sown has not been satisfactory, a good deal of it was unfit for hemp, many acres indeed were not worth pulling, other fields on the contrary yielded more than I ever expected from them. I will give you a statement of the crops of one of my farms for three succeeding years. The land has not been surveyed, but I am convinced it does not exceed eighteen acres. From this land I made in the year 1808, 16,500 wt., in 1809, 16,000 wt., and in the year 1810, 11,000 wt. The deficiency of the crop of last year, I ascribe to the extraordinary drought of the last spring.—The result of this experiment was the more satisfactory, as it enabled me to make an accurate comparison between the produce of hemp and tobacco on the same land.—In the year 1807 I had all the land (and about thirty thousand hills more) in tobacco that I afterwards sowed in hemp. That part of the land which was sown with hemp, had brought a fine crop of tobacco, and yet I made more pounds of hemp from it alone, than of tobacco (with the product of the additional thirty thousand hills included) with less labour, and less interference with the wheat and corn crops. This experiment I deem very satis-

factory and conclusive in favor of hemp. On another farm, I made last year, twelve thousand weight of hemp from about 25 acres, of which, five acres at least were not worth pulling, and that I have this year, either thrown out of the culture or manured highly.

4th Query. What is the best mode of steeping or watering, and whether you have tried the French process by hot water and soap?

Answer. This question I have purposely delayed answering, because it is one of great difficulty, and my own experiments do not afford me very satisfactory means of solving it. In 1808, when I made my first crop of hemp, I was entirely ignorant of every mode of managing it. I thought it safer to adopt the method that had been practised, in the small way, in this part of the country, where hemp had long been raised, by some people, for making rope for the use of their plantations, and to familiarise my people to the culture before I ventured on any innovation. The inducements to water-wetting are strong, the hemp is said to be better, and of course commands a better price; I therefore felt considerable anxiety on this subject. The French process appeared to me impracticable on a large scale, for the bulk of hemp when good, from 70 to 80 acres of land is immense. The streams convenient to me, were objectionable; liable to be suddenly raised so as to endanger the hemp, by carrying it off, or to injure it by making deposits of mud. I therefore availed myself of a wide and deep ditch at the foot of a hill which I enlarged, and where I had a perfect command of water, being able to let off or on at pleasure. I was pleased with the situation, and made it large enough to hold as much in the stalk as would yield about 800 or 1000 wt. of clean hemp. In this place I have tried water wetting two years, the result has not been very satisfactory; the labour of putting in, taking out, drying and securing, is very great and unpleasant.—The hemp managed in this way is more tedious to break—my people cannot break more than half as much water wetted, as of dew wetted, and my observations induce me to believe that the loss is much greater. I believe, also, that in one respect, the hemp is injured, by breaking the fibre of the bark. From a small experiment that I made last year, of wetting hemp in the river, I am inclined to suppose, that where it can be immersed in large volumes of water (free from the risk I before mentioned) the object would be accomplished with more certainty. I think that in my ditch or pond the quantity of water is insufficient for the hemp. The water-wetted hemp I have sent to market, has certainly commanded a readier sale and higher price than dew wetted; but I question if I have been more than reimbursed the extra labour, and loss of hemp in the way I have managed it. I would not have you infer from this, that I mean to abandon water wetting, or that I am prepared to say it is not the most eligible mode of managing hemp. My opinion of the loss is conjectural, and I will, the ensuing fall, make some experiments to ascertain the matter with precision; if I succeed in watering it properly, I feel almost convinced that the difference will be found not to exist in breaking at least; this, however, I deem of small consequence, as I am satisfied that we shall soon break our hemp by machinery, that will very much diminish the labour—my experiments in water-wetting, shall be very much diversified, as I am still sanguine in my expectations that I, or some other person, will succeed in discovering the right method. Should it be my good fortune, it will give me real pleasure to communicate the result to you, and to my other countrymen through the Richmond Agricultural Society, to which I intend to present a copy of this letter.

The most unpleasant labour in the hemp crop, and that which presses most, is pulling—to pull a quarter of an acre, is said to be a day's work for a man.—In the Western country it is cut with a knife or hook, and it is said to be as easy to cut half an acre as to pull a quarter. This is important in two points of view—it saves labour, and will enable you to double your crop of hemp; for the crop of hemp a man can make is limited only by the land he has proper for its production, and his ability to save it in due time.

It is easy to sow, to wet and to break much more than it is practicable to manage in the season of harvest. It is true that cutting will occasion some loss of weight, but I am convinced the hemp will be more valuable. The bark of the root disfigures the appearance of the hemp, and cannot be spun to advantage with the finer part of the bark of the stalk above the root. Most of the roots indeed are broken off and lost by the break.

Hemp seed is made by suffering a part of the crop to remain until it is ripe, or by drilling it and cultivating it like corn, taking care to pull up in good time, the stalks that will not bear seed.

I will take the liberty to add to this letter, long as it already is, a comparison between the labour necessary for a crop of hemp and a crop of tobacco, from which it will be obvious, that the former interferes less with other crops, and requires, likewise much less labour. It is known that hemp does not exhaust the land; while growing, it shades it completely; it prevents it from washing; deposits a considerable quantity of leaves and farina, and if the herds be used in a farm yard, their absorbent properties render them an excellent material for manure. Upon a plantation of 500 acres of open land, on which from 90 to 100,000 tobacco plants are cultivated, ten hands must be employed all this year: this crop, with as much corn as will support the plantation, and ten bushels of seed wheat to each hand, is as much as can be managed, with the utmost industry and attention, and every facility that can be derived from good team and implements of every sort.—The produce of this labour when applied upon good land, I estimate as follows, and this I know to be above a fair average.

1500 lb. of tobacco at	\$6 is 90
100 bushels of wheat	: 100

190

\$190 to each hand is for ten hands	1900
Deduct for the amount of hire of each hand, taxes, maintenance and tools, \$80 each, on a farm of equal size	800

Balance, Dollars	1100
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I would sow 120 acres in wheat, chiefly on fallow and would expect 15 bushels to the acre	1800
18 acres in hemp at 500 lb. to the acre is 9000,	
a 10 cents	900

2700

This crop would be managed with six hands, for expenses deduct 80 each	480
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Balance, Dollars	2220
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I believe the above to be a fair estimate. I am convinced I can make more pounds of hemp than tobacco upon the same land, and that it is worth more. I refer to the state of the market for an average of years. That more land can be cultivated in wheat with a hemp than with a tobacco crop, is demonstrated by its being shown that hemp and wheat never require the planter's attention at the same time; whereas it is notorious that in harvest in the threshing and seeding, and in the preparation for seeding, great attention is necessary to the tobacco crop; that the land is less injured, can be better prepared, and more of it manured, is equally obvious. But to put this out of all doubt, I subjoin the following statement to show the number of day's work required to make each crop and the season when the labour is performed. I do not take into the estimate the time that is required to break or prepare the land for hemp, because precisely the same preparation would be advantageously bestowed upon the land that is to be planted in tobacco, and I have not noticed the ploughing the tobacco.

Time necessary to cultivate a crop of nine thousand tobacco hills, by one man, estimated in days work. Preparing, burning and seeding plant patches, nine days, January and February. Hilling, turning and cutting off 20 days, April and May.

Planting and replanting four days, May and June.
Weeding and hilling twice, 15 days, June and July.
Topping, 5 days, July.
Worming and suckering, 24 days, Aug. and September.
Cutting, housing and curing, 16 days, Aug. and September.

Stripping and prizing, 20 days, Fall and Winter.
Total, 113 days.

The same as to three acres of hemp.

Pulling	12	August.
Picking up	3	
Spreading	3	November.
Picking up	3	March and April.
Breaking	18	

39 days.

In this estimate I have said nothing of clearing land for tobacco, which precludes every other improvement, and unless tobacco is made upon new land, an average crop of 1500 to the hand ought not to be expected. Upon old or manured land, hemp is a more certain crop than tobacco. Manured land is best for hemp—every man who can manure an acre of land (and every man might do much more than that) may keep up a crop of three acres to the hand, as land that is manured, will continue to bring good hemp for more than three years, and after hemp, as after tobacco, you may expect a fine crop of wheat.

I fear you will think you have cause to lament engaging in a correspondence with a man who has so little consideration as to give you the trouble of reading a letter of the length of this. My apology must be my desire to be useful. I would not have troubled you with observations on the tobacco crop, but for my knowledge that much tobacco is made in your state, and believing it is a rational object that the labour of every man should be employed to the most advantage; it occurred to me that it might be useful to make the comparison that I take the liberty to present to you, although it did not fall within the scope of your enquiries.

I am respectfully,
Sir,

Your humble servant,

WILSON CARY NICHOLAS.

William W. Rodman, Esq.
Washington, N. C.

MANUFACTURES.

For the American Farmer.

MR. SKINNER.—I peruse your very valuable numbers, with great satisfaction, as they contain more interesting and valuable matter, than is to be found in any other weekly paper, which has fallen under my notice; yet I find in them some publications, the truth and propriety of which I can neither see or assent to—I allude to those addresses to the *Southern Agricultural Societies*, in which the speakers take notice of the lately proposed Tariff—as being calculated to place the manufacturers at the head of the numerous classes of *Labourers*; particularly above the cultivators of the soil. In short, to render the Manufacturers a *privileged order*, granting them a monopoly, as against, not only the cultivators, but also against the merchants and ship owners—In fact as a tax on the *many* for the benefit of the *few*.—Now, Sir, I am not foolish enough to undertake to discuss the subject of the proposed Tariff, in all its parts and bearings, but I fearlessly maintain that an attempt by our government to protect manufactures, by judicious

regulations (not merely with a view of aiding the revenue) would be both wise, proper and patriotic—I consider, that the farmers or planters (as relates to the Southern cultivators) are no more *Antipodes*, (as to their separate interests) to the manufacturers; or the manufacturers to the farmers, than they are as it respects their *local situation*—what benefits one class, must equally benefit the other. All must rise or fall together. It is true that the cultivators of tobacco and cotton wool, can better sustain themselves than the cultivators of Indian corn and wheat—than any of the numerous and various labourers and cultivators of the soil, in the middle, northern and western states—or the merchants and ship owners of those sections of the Union—the British merchants and vendue masters only, excepted. And I simply request that the Southern planters and farmers will recollect, that although *they* may not sink into entire insignificance under the strange infatuation, of *being let alone*; of being permitted to buy of whoever will sell to them, what they want to purchase cheapest: yet their brethren of the northern and western states must become wretchedly poor under such a system, as long as the European governments, wholly, or nearly so, reject all their products. It is pretended, that those governments are sick of their restrictive measures; and, therefore, it would be the extreme of folly for our government to extend our restrictive measures; when they are so sick of theirs. But, Sir, I deny that we have any evidence that any of those governments are sick of their restrictive measures—that is, as to *foreigners*—it is true, that the merchants of Great Britain wish that the East India trade—particularly to *China*, may be thrown open to all the subjects of *Great Britain*, against the monopoly of the East India Company. Some of the manufacturers and ship owners, wish their *corn laws* repealed, that the people might get bread, &c. on more reasonable terms: but it is well known that the *Land proprietors*, like the great *Southern planters* with our government, have too much interest and influence with that government, to permit any relaxation in respect to their corn laws. As to all the other European governments, their restrictions are as rigorous as those of Great Britain—in some instances more so; and are of so recent a date, that no hopes can be entertained of their abandonment. I am aware that all these observations may have been, before, often made; but as often as the *hue-and-cry* is reiterated against *manufacturers* and the *tariff* as designed to tax the many, (the consumers) for the benefit of the few (the manufacturers) it seems proper that a protest against this absurdity should be repeated—and the same arguments, if such these observations may be called, should be restated.

I beg leave, Mr. Editor, through the medium of your paper, to ask the good people of Virginia, the two Carolinas and Georgia—together with those of Louisiana, Alabama, and Florida—how the United States are to be supported—if all these middle, northern and western (that is over the mountains) states, are left to struggle with the restrictive measures of all the Eu-

ropean governments—who shut out all their products, except pot and pearl ashes—their staves and flax-seed? The northern people must have more clothing—more articles of consumption of every kind, than what will be necessary for an equal number of labouring people in the southern states. This arises from the *climate* and the *kind of inhabitants*—one being a great portion of them *slaves*—the other principally *freemen* and *yet labourers*—and some of the states wholly of freemen. If these are suffered to be oppressed by *foreign regulations*, it is manifest they cannot pay much *impost* for the support of government. Can the southern states, wholly support the government of the Union? So inquires

A NORTHERN MAN.

TIMBER.

To the Editor of the American Farmer.

MR. SKINNER.—The valuable communications of Commodore Porter, upon the subject of Timber and its preservation, have evinced that the Commodore is worthy to fill the high and responsible station in which he has been placed; he has given salutary warning—his duty upon this subject is performed—those who possess the soil of our country, who feel for our weight and dignity as an Empire, should avail themselves of the information they have received—they should do their duty—our country expects it. If every landholder would set apart but two days in a year, to the planting of Locust, Mulberry and Oak, it would be found that in 50 or 100 years timber would be better, and more abundant than it now is.—The farmer who only makes his calculations and arrangements, with a view to his particular interest, would find it much to his account, to have a small nursery for drilling (in the manner of peas) the seed of the Locust, from which he could transplant every year; this is the most durable wood, and invaluable for ship building and farming purposes, and is known to do no injury to the neighbouring crop. Chesnut might also be planted in small orchards, say one acre in 100, which would give abundance of fencing, and thereby enable many farmers to bring into cultivation, large bodies of land, now in *scattered wood*, and from its pillaged state, of very little value. I know many farms of 1000 acres, that have 3 or 400 acres of what is called wood land, that would not give as much rail timber of good quality, as half a dozen acres of chesnut would—but to “take a bond from fate,” let them for convenience sake, have two acres of chesnut to each 100, and place an acre at each extremity—this I am persuaded would be fully equal to any live fence—it would beautify the country, and the woodland might then be devoted to such timber as would serve the purposes of the Navy. The bad and unsound growth would be sufficient for fuel—my remarks as relate to the Navy, will apply only to that portion of country, where the price of timber will pay the carriage and give a profit. It may be said that this is very pretty upon paper—that something should be done where the weight and dignity of the country is concerned, is admitted by all.—Would it not be wise, Sir, for all to say that a

law should pass to enforce some regulations, productive of this good and national end? Is it not *general good*, that induces us to pass laws for the preservation of morals and the protection of property? Let me ask, what would now be the state of our agricultural interests, if early provision had not been made for its protection, as was made for the protection of morals? You may lash men and women too, Sir, into the best moral appearances in a short time; but, Sir, who can put us in possession of our Ship Timber and our fat land again? We ring the nose of a hog that destroys his own pasture, yet the man who destroys the inheritance of our Heavenly Father, to all his children, does nothing worthy of punishment—deface a mile stone, and you are fined—gully, impoverish and destroy as much of the inheritance of the human family as you please, and you do no more than exercise the rights and privileges of a freeman—Experience has taught us much, but great is that which we have yet to learn. The oak is not yet planted, that shall buoy the fearless sons of this mighty Empire through enterprizes, corresponding with our developments. Time and experience will teach individuals, that their interest is the same as that of the Nation.

Very respectfully,

A VIRGINIAN.

FOR THE AMERICAN FARMER.

On the Culture and best distances for planting INDIAN CORN.

SIR,

American writers upon agriculture, most generally have declared open war against the cultivation of the invaluable Indian Corn or Maize, and almost without an exception recommend, that we should not cultivate our usual quantity, but increase our crops of wheat and grass.

If, by their instructions, they mean to prevent us from wasting our time and labour upon poor lands, under bad management, they are right; but, it is my opinion, that we cannot grow too much of a grain, which, when we consider the various uses to which it is applied, the convenience and economy with which it may be fed, may be justly esteemed a blessing to our happy country, beyond all other grain. It does not, indeed, sell for as much per bushel as wheat, but for nearly as much as rye—and, as a food for stock, it is more valuable than either. That it is a profitable crop to the grower, I give one fact in evidence: enquire of any intelligent country merchant, and he will inform you, that the good corn farmers are the money-making farmers—and we all know that to this precious grain we are indebted for fat horses, fat oxen, fat beeves, fat hogs, fat poultry, and contented servants. One year with another, the fair price of corn is about half the price of wheat, and this value seems to be governed more by the produce, than by intrinsic value. The land which will produce five bushels of wheat to the acre, will produce ten bushels of corn; if twenty of wheat, forty of corn, and so on, in nearly the same ratio; with this difference, however, that in some few situations,

good wheat land will not produce heavy crops of corn, while, in extensive districts, first-rate corn land will not produce heavy crops of wheat.

The farmer, who attempts a crop of corn, must plant early, and cultivate with care and diligence, never suffering grass or seed to gain possession, nor the land to become baked, or with a hard crust, however clean it may be; but these principles are so universally understood, that any further remarks from me are unnecessary, and I proceed to what is not so generally agreed upon, the best distance at which to plant.

Although we may have a good or bad crop upon an equal number of stalks, yet it is reduced to certainty, that a great crop cannot be made without a great many stalks, and when I hear of eighty to a hundred bushels to the acre, I am convinced that such great produce is not merely owing to a fortunate season, and good tillage of good land, but also to the fact, that more stalks have been grown upon the acre, than is customary with us in Maryland.—Impressed with this opinion, I have made various experiments to ascertain that distance which will unite most advantages with the fewest disadvantages, where wheat or winter grain is sown among corn, and have at last settled down to rows seven feet wide, and two feet apart in the row.

This is called drill planting, step corn, or nit and miss corn, a mode of planting occasionally practiced time immemorial. Two feet is the natural and easy military step, which the dropper soon acquires to great exactness.

Our corn fields are upon a large scale, and most generally small grain is sown among the corn. We will take a field of 250 acres, and suppose it a square, which will give us 200 perches each way.

	<i>Hills.</i>
At 7 by 2 feet you have in this field,	777,857
The almost universal distance with us is 4 feet 6 inches each way, and which gives to us	537,778

Difference, 240,079.
But this is not the only difference, it is well known, that very little wheat is grown in the furrow or clearing out of corn ground, even upon prime—and upon weak land, what little does grow cannot be saved.

Your field then being 200 perches square, at 4 feet 6 inches contains 735 furrows, while at 7 feet there is but 471

Difference 264,
which, allowing one foot in width to each furrow, makes a difference of twenty acres, or one twelfth less of wheat. The cross tillage wastes yet more, and in particular on flat land—for at the angle of every crossing, a cup is formed, which not only retains superfluous water, but at which the soil is deteriorated by frequent ridging up the good soil, and by the frost retained in that cup.* There is an advantage in seven feet

* On corn ground, the best wheat is on the ridge, the worst in the furrows, and a medium at the angles of crossing.

drills, beyond the points enumerated—nine feet the cut of a wheat cradle, taking two lands of four feet six inches each, is too great a sweep, except for long armed, skilful, and willing cradlers. Nineteen times out of twenty, the wheat is so scooped out, as to cut off the heads at the pointing in and out, with so little straw attached, that a vast proportion of grain is lost. Upon an average of hands, a seven foot sweep is enough for clean work—and, if you must hurry, (which is in no case prudent) you step longer, and strike deeper in.

If my remarks meet your approbation, you shall hear further from

Your obedient servant,

F.

23d Nov. 1821.

Does not our experienced and much respected correspondent consider it better husbandry, to remove the corn, stalk and all, *before* the wheat is sowed?—an operation which is now necessarily delayed to avoid the ravages of the fly—or, does he consider that under general circumstances, such removal of corn and stalk is impracticable? Again—Suppose a system of cultivation on a small field where the corn is to be removed before sowing: at what distance would he then plant. We are always so much pleased when we can get our friend F. afield, let the object in pursuit be what it may, that we now take leave to ask his opinion, whether it be the better plan to select seed-corn from stalks bearing the greatest number of ears, or to take it carefully from such as bear but one large one. In the former case the number of ears would, in process of time, be doubtless, greatly increased—query, would the quantity of grain be?

Edit. Am. Farmer.

To the Editor of the American Farmer.

SIR,

The day being cold and rainy, with the wind at N. E. my horses at their cribs in the stable, and cattle under good shelter in the barn yard; some of my hands employed thrashing out grain—some cutting straw with my patent cutting knife—others shelling corn with my patent corn sheller—some making axe helvies, rake handles, &c. &c.—and all in some way employed, I determined to pass a social morning, chatting with my old aunts, who were sewing and knitting by a comfortable fire, with their maids at work in different parts of the room—some picking wool, some carding, while others were whirling around the good old fashioned big wheel, the only musical instrument in the family, except the horn which calls the workmen to their meals; all, in fact, were in some way or other employed, except myself—and the noise of the wheel, and other operations going on, not permitting me to read aloud, as is my custom, the American Farmer, the Agricultural Almanack, &c. I took out my tooth-pick, and, seating myself before the fire, in my old arm chair, began to pick my teeth: after meditating some time, pray, said I, addressing my aunt Deborah, pray said I, can you tell me why people complain so much about hard times? Our crops have been as abundant as they have ever been; our lands are more productive than formerly—and, if their produce when sold will not bring so much as they did a few years back, we have less to pay for the articles we purchase—this unvarying produce of the land, and reduction in the prices of tea, sugar, coffee, cloth, &c. one

would think would make times for farmers better instead of worse; what is the reason then that people, and particularly farmers, complain so much of *hard times*?

"My dear nephew," said the old lady, laying down her knitting, raising her spectacles from her nose, and gravely and deliberately taking a pinch of rappee, always the precursor of some good remark, as the time of taking the snuff is a time for reflection;"* "My dear nephew," "times in reality are no worse than they were before, but the imaginary wants of people, caused by the introduction of new fashions, and new ways to gratify vanity, have made them appear so; the profits of my pantry have for many years supplied my ward-robe—but I wear no Leghorn bonnets at 30 or 40 dollars a piece," (cutting her eye at aunt Simplicity, who had once laid out all her savings on one, when she wanted to catch my friend Charley;) "our knitting and our spinning furnish for the family, clothing of a more comfortable kind than broad cloth—turning her head towards my Sunday coat which was hanging on a peg—our butter, our cheese, our calves, and our pigs furnish us with gowns. There is nothing more wholesome than cyder and parsimon beer,"—(here my aunt asked for a glass of rattifée, as she had, she said, a touch of the cholic)—"the skins of our cattle furnish us with shoes without the aid of prunella and kid—our beeves and our hogs furnish us a food superior to anything foreign—the produce of our fields furnishes bread for ourselves, and food for our stock, and wherewithal not only to pay the hire of hands, but our taxes, and enables us to lay up a little at the end of the year. We have no more cats than can catch mice, and no useless mouths to feed—the Simples have always lived as we live, and have always made out to make both ends meet—we have never had more wants than we had means of gratifying; we, therefore, have never felt hard times."

Look now at our neighbours the Simpletons, their farm is only one fourth the size of ours—it was purchased on credit, and mortgaged to raise the means of improving it, that is, building a fine house. The old gentleman and his wife, they have their coach and pair, the young squire he has his nag for his special use, and the two young misses Amarilla and Angelica Simpletons, have each their palfrey—and all this, including the coachman, footman, &c. are exclusive (I was going to say independent) of the farming establishment. They are eternally on the road, or at the manger, visiting or entertaining friends, to the neglect of their business, and consuming the produce of the farm without making any return. Now we will not take into calculation the expense of saddles and bridles, harness for horses and livery for servants, Leghorns, and feathers, marinos and Cashmeres, frills and turbelous, corsets and stiffeners, dandy coats, and Cossac trowsers, port wine and Madeira, Imperial and gun powder, Mocha and double refined, plumb cake and pound cake, with a thousand other *et-ceteras*; we will merely make our calculation of the expense of the aforesaid five horses, which are

preferred, to the impoverishment of every other animal on the farm, if that can be called one, which is very little better than a neglected waste.

To make a comparison, we must have something to compare with—we will take a man. We will make a comparison between the consumption in food of a horse and man.

In Virginia, a peck of corn meal per week is considered an allowance for a negro. A well fed horse will eat a peck of corn a day, besides hay to an equal amount. A horse then eats as much in one day as will supply a negro two weeks: then the expense of feeding one horse is equal to the expense of feeding fourteen negroes—consequently the expense of feeding the fine extra horses on neighbour Simpleton's farm, is fully equal to the expense of feeding seventy negroes: besides this, the horses must have more to take care of them, who must not only be fed, but be clothed too, and their feed and their clothing alone, would be sufficient to pay all the expense of the farm, was it managed as it ought to be. But the farm does not produce enough to pay the hands, occasional loans must be had from the bank to obtain means of buying finery for the girls, paying off the young gentleman's taylor bills, the old gentleman and lady too ran up a bill where they can obtain credit, pay day comes round, creditors will be satisfied, interest on interest is accumulating, nothing coming in, ruin staring them in the face, no efforts made to retrench—and the constant cry is "hard times!! hard times!!"

By this time the storm had cleared off, and recollecting that I had in stable one horse—(though a favorite of mine) which might be done without, I went out, to give orders that he should be sent to town and sold next day.

JEREMIAH SIMPLE.

P. S. A learned friend of mine, a farmer, lately sent me some "native cotton, the spontaneous growth of his farm." I was much pleased with it, and gave it to my aunt Simplicity to spin: she tried and tried over and over again, but could make nothing of it—at length aunt Deborah asked for it to look at; she first examined the cotton, then the seed, next the pod, and next the stalk and leaf. Pray, said she, who sent you this? "Why Mr. so and so." What does he call it? "Cotton, cotton!" Now my aunt is a great lover of the poets, and sometimes quotes them. So placing herself in one of her poetical, or granny attitudes, says she 'tis what"

"The learned Cotton, unlarned Milk Weed calls." And threw the whole of it in the fire. J. S.

FOR THE AMERICAN FARMER.

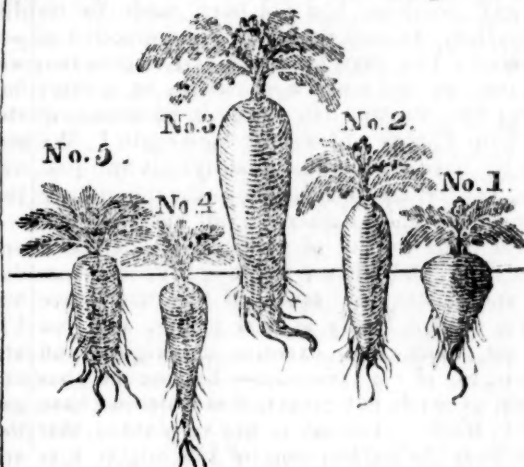
Mangel-Wurtzel, Carrots, &c.

Baltimore County, Nov. 30.

SIR,—

I procured the seeds of several varieties of Mangel-Wurtzel and Carrots last spring, for field cultivation, in consequence of the communications which have appeared in your journal respecting the value of different root crops. I could only obtain four parcels of Mangel-Wurtzel seed, although I sought for them in many places, in the hope that some of them

might prove to be of the genuine variety. The roots produced by two of these parcels of seed were of a coarse character, much alike, wide at the top, grew almost wholly in the ground, and tapered rapidly to a point, as represented by figure 1, in the annexed drawing. The



roots of the third parcel were larger than those of the two first; they grew about one half above the ground, and retained their size pretty well within the soil, as shewn by figure 2, but the roots of the fourth parcel of seed, and which was obtained from Mr. E. S. Thomas, Baltimore, accord precisely with the description given by writers of the *genuine Mangel-Wurtzel*: they grew from twelve to eighteen inches above, and from three to five inches below the surface of the drills; at the top they were as large as either of the other kinds, and maintaining their greatest size quite to the ground, they were full at the termination, as represented in figure 3.

The leaves on all were very abundant, and were stripped off the plants five times in the course of the summer. From the small spot where the best kind grew, and which does not exceed the fifteenth part of an acre, I obtained four cart loads of trimmed roots, that measured thirteen bushels each; or, at the rate of seven hundred and eighty bushels per acre! This ground was in good tilth, and two small cart loads of unrotted manure were distributed in the drills. I thus obtained a better return from it, planted with Mangel-Wurtzel, having reference to the quantity, or quality, or both, than the same space has ever yielded me before, which inclines me to believe that the Mangel-Wurtzel is better adapted to our climate than any other root—an opinion which has heretofore been well maintained in the American Farmer. Persons who wish to cultivate this crop, to any extent, should first obtain seed which they know to have been carefully saved from roots of the proper sort, then select a piece of good land for the purpose, & make it thoroughly rich, by manuring it broad cast, and also in the drill. With this management I am satisfied they will obtain a greater and more valuable produce for the sustenance of cattle, sheep and swine, than could be made in this neighbourhood by any other means. And by the drills being two and a half feet apart from centre to centre, intermediate rows of turnips may be sown to great advantage, late in July or early in August, as they

* Parson's about smoking don't forget.

would then have time enough to mature before the setting in of severe frost. A double crop might thus be made in one season from the same ground, with scarcely any more labour than either would require, and without incurring the hazard of loss, which so often occurs when we depend entirely upon the turnip crop for a winter's supply of succulent food.—The Mangel-Wurtzel is in itself a very sure crop, but should it fail in places, these may be filled up with cabbage plants, or subsequently with turnips, so that we may with certainty count upon a full, although it may be a mixed crop. It has also occurred to me, that the Mangel-Wurtzel might be profitably cultivated in corn fields, for I believe the shade of the corn would not retard its growth, and the cultivation required by that crop would leave nothing to be expressly done to this, except in the earliest stage of its growth, when the plants should be thinned, and the drills cleared of weeds.—It would be well however to test this opinion, upon a small scale, before any other reliance is placed upon it—and I recommend that the rows of corn should be six feet apart, and the root drills in the centre.

Of Carrots.—I obtained seeds of two kinds, the long orange; and the short, or horn, or stock carrot. The first is a kind very commonly cultivated, the roots of which attain a good size, as shown by figure 4. But the second, or short kind, cultivated in the same manner, yielded me more than twice as many bushels from an equal quantity of ground, although these were sown some weeks later than the other, and both crops gathered at one time. The short carrot is better flavoured and more delicate than the long. I should be satisfied to cultivate it as a crop for cattle, having reference not only to its quality, but likewise to its acreable produce. Its form is correctly represented by figure 5—and the seed of it which I used, was bought of Mr. E. S. Thomas, Baltimore; from whom I shall have to get some more next spring, but thereafter I shall have enough of my own raising, which, from experience, I prefer to those of the shops. And that you may have it in your power to distribute some seed of the true Mangel-Wurtzel, and this approved carrot, for cultivation in the spring of 1823, I will take the liberty of sending you two dozen roots of each of those plants.*

I have, for the last four years, raised the Ruta Baga, the white Norfolk, the yellow bullock, and the red tankard turnips, but not with uniform success. The first and fourth years I sowed the seed on good grass ground, which had been pastured close for two years previous, & I gathered good crops of each kind. The 2d year I sowed after oats, the 3d year after wheat, having first ploughed in the shattered grain, and allowed it to vegetate before I ploughed for turnips; but in these years I had very indifferent root crops, although the ground was rich and heavily manured after harvest. I have heretofore sowed but a small proportion of my turnip ground with Ruta Baga seed, as I only expected to raise enough of it for my family's use—for I was always disappointed in their

* We will thankfully receive the promised roots, and take great pleasure in raising, saving and distributing their seeds.
Editor Am. Farmer.

growth when I sowed the seed in June, or early in July, and I considered it too late to sow them after those periods as a crop for cattle—they take so much longer to mature than other turnips.

Next year I will endeavour to cover three acres of rich ground with the true Mangel-Wurtzel and short carrot, in alternate drills, with rows of turnips between them; I will then invite the editor of the American Farmer to do me the favor to come and find fault with my labor as he may—and I will requite one good turn by doing him another.

Very respectfully,

Your's, &c.

M. N.

Olives, Capers, Figs.

From Doctor James Mease's "ARCHIVES OF USEFUL KNOWLEDGE."

[The acquisition of the Floridas, augments the interest of that portion of the following letter, which relates to the Olive—since it is acknowledged that a large part of that territory is adapted to its cultivation.]—Edit. Am. Farmer.

The following letter on the cultivation of these fruits, was addressed by Mr. Jefferson while minister of the United States at the Court of France, to the Agricultural Society of South Carolina, and published by them in 1788.

Paris, July 30, 1787.

"I was induced, in the course of my journey through the south of France, to pay very particular attention to the objects of their culture; because the resemblance of their climate to that of the southern parts of the United States, authorizes us to presume we may adopt any of their articles of culture, which we would wish for. We should not wish for their wines, though they are good and abundant. The culture of the vine is not desirable in lands capable of producing any thing else. It is a species of gambling, and of desperate gambling too, wherein, whether you make much or nothing you are equally ruined. The middling crop alone is the saving point: and that the seasons seldom hit. Accordingly we see much wretchedness amidst this class of cultivators. Wine too is so cheap in these countries, that a labourer with us, employed in the culture of any other article, may exchange it for wine, more and better than he could raise himself. It is a resource for a country, the whole of whose good soil is otherwise employed, and which still has some barren spots, and a surplus of population to employ on them. There the vine is good, because it is something in the place of nothing. It may become a resource to us at a still earlier period, when the increase of population shall increase our productions beyond the demand for them, both at home and abroad. Instead of going on to make an useless surplus of them, we may employ our supernumerary hands on the vine. But that period is not yet arrived.*

* This reasoning applies very forcibly to the Atlantic States, but at the time the above excellent and patriotic letter was penned, the Western States except Kentucky, were not settled. In those states wine is now made to a profit, from European grapes, by two colonies of Swiss; and also at Harmony, near Pittsburgh by a settlement of Germans. See Cumming's Tour. Our native grapes would supply much better

The almond tree is also so precarious, that none can depend for subsistence on its produce, but persons of capital.

The caper, though a more tender plant, is more certain in its produce; because a mound of earth, of the size of a cucumber hill, thrown over the plant in the fall, protects it effectually against the cold of the winter. When the danger of frost is over in the spring, they uncover it, and begin its culture. There is a great deal of this in the neighbourhood of Toulon. The plants are set about eight feet apart, and yield one year with another about two pound of capers each, worth on the spot six-pence sterling the pound. They require little culture; and this may be performed either with the plough or hoe. The principle work is the gathering of the fruit, as it forms. Every plant must be picked every other day from the last of June till the middle of October. But this is the work of women and children. This plant does well in any kind of soil, which is dry; or even in walls, where there is no soil; and they last the life of a man. Toulon would be the proper port to apply for them. I must observe that the preceding details cannot be relied on with the fullest certainty; because in the canton, where this plant is cultivated, the inhabitants speak no written language, but a medley, which I could understand but very imperfectly.*

"The fig and the mulberry are so well known in America, that nothing need be said of them. Their culture too is by women and children, and therefore earnestly to be desired in countries, where there are slaves. In these the women and children are often employed in labours disproportioned to their sex and age. By presenting to their master objects of culture, easier and equally beneficial, all temptation to misemploy them would be removed, and the lot of this tender part of our species be much softened. By varying too the articles of culture, we multiply the chances of making something, and disarm the seasons, in a proportionable degree, of their calamitous effects.

"The olive tree is the least known in America, and yet the most worthy of being known. Of all the gifts of Heaven to man, it is next to the most precious, if it be not the most precious. Perhaps it may claim a preference even to bread, because there is such an infinitude of vegetables, which it renders a proper and comfortable nourishment. In passing the Alps at the Col de Tende, where they are mere masses of rock, wherever there happens to be a little soil, there are a number of olive trees, and a village supported by them. Take away these trees, and the same ground in corn would not support a single family. A pound of oil, which can be bought for 3d. or 4d. sterling, is

wine than what is transported from the Seaports: and every industrious farmer might supply his own table with the article, at one-fourth the cost of imported wine, and yet not encroach upon the business of the farm.

Editor of the Archives.

* Until the true caper shall be imported, the common garden Nasturtium, *Tropeolum majus*, which by many are preferred to capers, might be cultivated. In the Philadelphia market great quantities are annually sold to excellent profit, for pickling.

Editor of the Archives.

equivalent to many pounds of flesh, by the quantity of vegetables it will prepare, and render fit and comfortable food. Without this tree the county of Provence, and territory of Genoa would not support one half, perhaps not one third, of their present inhabitants. The nature of the soil is of little consequence, if it be dry. The trees are planted from 15 to 20 feet apart, and when tolerably good will yield 15 or 20 lb. of oil yearly, one with another. There are trees, which yield much more. They begin to render good crops at 20 years old, and last till killed by cold, which happens at some time or other, even in their best positions in France: but they put out again from their roots. In Italy, I am told, they have trees 200 years old. They afford an easy, but constant employment through the year, and require so little nourishment, that, if the soil be fit for any other production, it may be cultivated among the olive-trees, without injuring them. The northern limits of this tree are the mountains of the Cevennes from about the meridian of Carcassonne to the Rhone; and from thence the Alps and Appennines as far as Genoa, I know, and how much farther I am not informed. The shelter of these mountains may be considered as equivalent to a degree and an half of latitude at least; because westward of the commencement of the Cevennes, there are no olive-trees in 43°, or even 43°, of latitude; whereas we find them now on the Rhone at Pierrelatte in 44°, and formerly they were at Tains, above the mouth of the Isere in 45°, sheltered by the near approach of the Cevennes and Alps, which only leave there a passage for the Rhone. Whether such a shelter exists, or not, in the states of South Carolina and Georgia, I know not. But this we may say, that either it exists, or that it is not necessary there—because we know that they produce the orange in open air; and *wherever the orange will stand at all, experience shews the olive will stand well, being a hardier tree.* Notwithstanding the great quantity of oil made in France, they have not enough for their own consumption, and therefore import from other countries. This is an article, the consumption of which will always keep pace with its production. Raise it, and it begets its own demand. Little is carried to America, because Europe has it not to spare, we therefore have not learnt the use of it: But cover the southern states with it, and every man will become a consumer of it, within whose reach it can be brought in point of price. If the memory of those persons is held in great respect in South Carolina, who introduced there the culture of rice, a plant which sows life and death with almost equal hand, what obligations would be due to him, who should introduce the olive-tree, and set the example of its culture! Were the owners of slaves to view it only as the means of bettering their condition, how much would be better that by planting one of those trees for every slave he possessed! Having been myself an eye-witness to the blessings which this tree sheds on the poor, I never had my wishes so kindled for the introduction of any article of new culture into our own country. South Carolina and Georgia appear to me to be the states, wherein its success, in favourable

Positions at least, could not be doubted; and I flattered myself, it would come within the views of the society for agriculture to begin the experiments, which are to prove its practicability. Carcassonne is the place, from which the plants may be most certainly and cheaply obtained. They can be sent from thence by water to Bourdeaux, where they may be embarked on vessels bound for Charleston. There is too little intercourse between Charleston and Marseilles to propose this as the port of exportation. I offer my service to the society for the obtaining and forwarding any number of plants, which may be desired.

“Before I quit the subject of climates, and the plants adapted to them, I will add, as a matter of curiosity, and of some utility too, that my journey through the southern parts of France, and the territory of Genoa, but still more the crossing of the Alps, enabled me to form a scale of the tenderest plants, and to arrange them according to their different powers of resisting the cold. In passing the Alps at the Col de Tende, we cross three very high mountains successively. In ascending, we lose these plants one after another, as we rise, and find them again in the contrary order, as we descend on the other side; and this is repeated three times. Their order, proceeding from the tenderest to the hardest, is as follows; caper, orange, palm, aloe, olive, pomegranate, walnut, fig, almond. But this must be understood of the plant only: for as to the fruit, the order is somewhat different. The caper, for example, is the tenderest plant; yet, being so easily protected, it is among the most certain in its fruit. The almond, the hardest plant, loses its fruit the oftenest, on account of its forwardness. The palm, hardier than the caper and orange, never produces perfect fruit here.

I have the honour to be, &c.

TH. JEFFERSON.

BONES.

From Willich's Domestic Encyclopedia.

Bones are very useful articles for making different kinds of toys, and also in several of the chemical arts, as for making cast iron malleable, for absorbing the sulphur of sulphurous ores, for forming tests and coppels, or vessels for refining gold and silver with lead; for burnt bones compose a mass of a porous texture, which absorbs vitrified lead and other metals while the unwitrescible gold and silver remain entire behind. They are used for the preparation of milky glasses and porcelains, for the rectification of volatile salts, and of empyreumatic oils, and for making glue. The bones of different animals are not equally fit for different uses: The bone of the cuttle-fish is used by gold-smiths for making moulds; those of bullocks for painters' black; also, in lieu of ivory, for toys and cutler's work. But the most important and beneficial uses to which bones may be rendered subservient, are those in rural economy.

Bones are an excellent manure, though not generally known; they should, however, not be calcined, as the animal matter will be dissipated by the fire. A. St. Leger, Esq. had once laid down to grass a large piece of very indifferent limestone land, with a crop of corn; and from this uniformly well dressed piece he selected three rods of equal quality with the rest, and manured them with bones broken very small, at the rate of sixty bushels per acre. Upon the land thus managed, the crop was infinitely superior to the

rest. The next year's grass was also more luxuriant, and has continued to preserve the same superiority for at least eight years, inasmuch, that in spring it is green three weeks before the rest of the field. He also dressed two acres with bones, in two different fields prepared for turnips, at sixty bushels to the acre, and found the crops incomparably more productive than the others managed in the common way. Upon grass lands, he observed, that this kind of manure exerts its influence more powerfully in the second year than in the first. For whatever soil it be intended, the bone should be well broken, before they can be equally spread upon the land. No pieces should exceed the size of small marbles. To perform this necessary operation, he recommends the bones to be sufficiently bruised, by putting them under a circular stone, which being moved round upon its edge by means of a horse, in the manner tanners grind their bark, will very expeditiously effect the purpose. Although bones of all kinds may be used with advantage, yet those of fat cattle are doubtless the best; but unground bones should never be employed, as they are of little or no service to the soil. A. St. Leger has also found it very beneficial to mix ashes with the bones: a cart load of the former being put to thirty or forty bushels of the latter, and heated for twenty-four hours (which may be known by the smoking of the heap,) the whole should be turned. After lying ten days longer, this excellent manure will be fit for use. Lastly, Dr. Hunter remarks, that the best method of grinding bones, is that between two cast metal cylinders. And as mills are very rarely erected purposely for this operation, the apparatus may be added to any common water mill, at a very trifling expense.

[Uses of a Dead Horse.]—We have a tolerably good poem on the life and death of a blood horse, “The high mettled racer,” tracing his progress from being the favourite of the turf, through all the grades of hardships, till he is worn out with hunger, labour and blows, in the cart of the scavenger; I fear a faithful account, not much to the credit of British humanity; I will now trace the progress of a dead horse through all the stages of his posthumous utility, ready to the credit of the skill and frugality of that most ingenious people, as economical manufacturers. When a gentleman's horse dies, the routine of disposing of the dead animal, is this. He is sent to the saddler, who gives credit for him at a guinea. The saddler gives notice to the currier, who has the horse conveyed to some repository for dead horses; where he is skinned, and the currier takes away the skin, leaving the carcass. The skin is depiled by lime, drest and tanned in the usual way: the offal of the skin cut off by the currier is sold to the glue maker: the offal of the leather during the process or after tanning, is laid by and sold to the makers of snuff-boxes, &c.

The dead horse, is a subject for dissection to young students in comparative anatomy, who pay for the license of going to the repository, a guinea a quarter. The flesh is then cut off, boiled, and sold to the people who hawk it about the streets of London in wheelbarrows, as cat's meat and dog's meat, at 1½d. per lb.

The hoofs, are sold to the makers of Prussian blue. The bones, are sold to two descriptions of manufacturers: 1st, to the makers of cart grease, who reside at the outskirts of London, and boil the bones for the sake of the fat and marrow; which, when, cold is skimmed off, and mixed with an equal quantity of tar to make the composition necessary to grease carriage wheels. Or, 2dly, they are sold to the manufacturers of volatile alkali, who make spirit of hartshorn and sal ammoniac, out of them, by distilling in large iron cylinders. The bones, thus boiled down, used, in my time, to be sent back again to a steam mill near St. John's, Clerkenwell, where they were ground into a coarse powder, and sold as a top-dressing for grain crops.—T. C.]

Oil and Tallow,

How to purify both, and blanch the latter.

To one gallon of oil add one quarter of an ounce

of finely powdered chalk, one quarter of an ounce of air slacked lime, and one half pint of water; stir then well, let them rest three or four hours, then add one pint of water and two ounces of pearl ashes, and place them over a heat that will just keep them simmering, till the mixture appears of a light amber colour, and has lost all smell, except a hot greasy, soapy scent. Then superadd half a pint of water, in which one ounce of salt has been dissolved; and having boiled them half an hour, pour them into a proper vessel, and let them stand till the separation of the oil, water and lime is completed.

Dossie's Communication to the Society for the Encouragement of Arts—Vol. XX.

We have seen the above directions applied to the purification of Tallow, and never before saw it so perfectly blanched; it was afterwards made into candles, and these burnt slowly and most brilliantly—the tallow near the flame presented the chrystalline appearance of Spermaceti, which is so pleasant to the eye; but it had the important advantage over Spermaceti, of being cheaper whilst we believe it afforded a more pure light. We recommend a trial of this process, on a small scale by housekeepers and Manufacturers—the latter might experience some difficulty in conducting the process at first, if tried upon too great a body of tallow, which if heated but a little too much, might get burned. Repeated trials on small parcels, will point out to them the proper way of carrying the process on largely, and we have no doubt that their candles, when made of Tallow, thus purified, would be better and handsomer, than they have ever been.

Common fish oil may be made by the above process, to equal the very best, and be prepared for the use of wollen manufactures.

And we hope that our hardy seamen, to whose enterprise our country is indebted for the oil we burn, may find a knowledge of this process, most useful to themselves. For its rationale and greater details, we refer those who have not the volumes of the Society at hand, to a valuable publication, the Emporium of Arts and Sciences, published at Philadelphia, by Professor Coxe.

Edit. Am. Farmer.

COMMUNICATED.

Infalible cure for the Rheumatism.

Take sharp vinegar (the sharper the better) and rub well the part affected with it, as warm as the patient can bear, for ten minutes, and apply wrapping paper to it dipt in vinegar, to be renewed twice a day—viz: in the morning before breakfast, and in the evening going to bed. When the patient begins to make use of the vinegar, it is necessary to take a strong physic, and at the same time a spoonful of molasses and flour of sulphur, mixed together before breakfast, and another when going to bed; in a few days the patient will be perfectly cured.

The person who publishes this receipt has tried it twice on himself with success.

A new and valuable Styptic. which will stop bleeding even of the largest blood vessels.

Take of brandy or common spirits two ounces; Castile soap two drachms; pearl-ash one drachm; scrape the soap fine, and dissolve

it in the brandy; then add the pearl-ash, mix it well together, and keep it close in a phial.—When you apply it, let it be warmed, and dip pledgets of lint in it, and the blood will immediately congeal.

It operates by coagulating the blood a considerable way within the vessel: a few applications may be necessary where the wound is deep, or where a limb is cut off.

RATS.

For their destruction, cut a piece of sponge into small pieces, dampen them a little in anniseed—then dip them in some melted dripping or fat. Lay them in the places infested, and it will be found equal to the most expensive or troublesome preparation.

To Plough Maker s.

The model of a new Excavator or Labour Saving Machine, is exhibiting at Batavia village (N. Y.) constructed on a principle which, it is said, with the power of two men will scoop up and discharge, several feet from the bed of a canal of deep cutting, three tons in 10 or 15 minutes; and, that by the application of half of the above power, the Machine can be made to plough a furrow in hard earth, eighteen inches deep.

Boston Com. Gaz.

THE FARMER.

BALTIMORE, FRIDAY, DECEMBER 7, 1821.

PRICES CURRENT.

Flour from the wagons \$6 6 $\frac{1}{2}$ to \$6 12 $\frac{1}{2}$ —Wharf Flour, 1000 bbls. at 90 days at \$6—Whiskey from the wagons, 31 cts exclusive of bbl.—Wheat, white, \$1 30 a 1 32—Red, do. \$1 25 a 1 30—Corn, old, 55—new, 50—Rye, 60—Oats, 34—Marketing, same as last report.

Maryland Tobacco—Fine yellow, none—good do. none—Fine Patuxent, red, \$8 to 10—good, do. \$5 50 to 7 50—Inferior, \$4 to 5, and in demand—Very inferior, no demand.

Virginia and Kentucky Tobacco—no sales.

To the Lovers of Rich Land.

Some of the most fertile land in America is offered for sale in quantities of from five hundred to 5000 acres—and in various degrees of improvement, to suit purchasers. It is situated on Pamlico Sound, between Mattamaskat Lake and the Sound—and within 25 miles of Ocracoke Bar, with navigation to the Barn-door; accompanied with all the benefits of fish and oysters, usual in such situations, and a choice of all the markets in the world for the produce of the land. The land will produce from 40 to 50 bushels of Indian corn to the acre for 100 years, without manure, with the slightest advantage of rotation of crops. It requires no rest. It is well adapted to the cultivation of wheat, cotton, and the grape. A more particular description is deemed unnecessary, as any one desirous of purchasing, it is presumed would wish to view the country. It is offered for sale, because the present proprietor, from peculiar circumstances, is desirous of leaving the state.

By application to the editor of the American Farmer, information will be received as to the address of the owner, for any one who may wish to correspond on the subject. The property will be sold on accommodating terms.

nov. 30

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The Linnæan Botanic Garden,

At Long-Island, New-York,

William Prince, Proprietor,

Now contains upwards of 4000 species and varieties of Asiatic and Native TREES and PLANTS among which are about one thousand varieties of the finest Fruit of Europe and Asia imported at a great expense from the most celebrated collections in England, France and Germany. This immense collection has been the labor of more than half a century, and is now considered at least inferior to none. Catalogues of those considered most worthy of cultivation, may be had of the subscriber, who will receive and forward orders.

CHARLES R. PEARCE,
70 Bowly's wharf.

nov. 30

English Thrashing Machines.

The subscribers offer for sale two English Thrashing Machines—a moveable one, the price of which they have reduced to \$375—a stationary one, the price \$325. Many of these machines being now in use, their advantages are well known. They thrash out from 15 to 18 bushels of wheat per hour, or 26 bushels of rye per hour.

They have also for sale two machines that have been a short time in use—a moveable one for \$350; a stationary one for \$250.

WM. DAWSON & CO.

No. 47, S. Gay-street,

Baltimore.

* Further particulars, and reference to those who have the machinery in use, by applying as above.

SHAKERS GARDEN SEEDS,

RAISED AT

NEW-LEBANON, COLUMBIA COUNTY, N. YORK.

And put up in papers, the retail price of each paper is printed opposite to each article.

FOR SALE BY WM. F. REDDING,

Rodgers' Alley, one door west of the Post Office, and adjoining the same.

Among which are the following:

Per Paper.		Per Paper.	
	cts. 16		
White Onion,	12 $\frac{1}{2}$	Large Sugar Pease,	6
Yellow Onion,	12 $\frac{1}{2}$	Early China Beans,	6
Red Onion,	12 $\frac{1}{2}$	Do. Cranberry Beans,	6
Blood Beet,	8	Do. Purple Beans,	6
Scarcity Beet,	8	Running Clapboard-	
Turnip Beet,	6	Beans,	6
Flat Turnip,	8	Running Cranberry-	
Carrot,	6	Beans,	6
Parsnip,	6	Large Lima Beans,	6
Early Cucumber,	6	Small Lima do. early	
Cucumber,	6	Whites,	6
Long Cucumber,	6	Sage,	6
Scarlet Radish,	6	Summer Savory,	6
Salmon Radish,	6	Red Pepper,	6
Black Winter Radish	6	Asparagus,	6
Yel. Swedish Turnip,	6	Red Celery,	6
French Turnip,	6	White Celery,	6
Early Curled Lettuce	6	Watermelon,	6
Ice Lettuce,	6	Muskmelon,	6
Head Lettuce,	6	Winter Crookneck	
Green Lettuce,	6	Squash,	6
Early Cabbage,	6	Summer do. do.	4
Drum head Winter-		Do. Scollop Squash,	4
Cabbage,	6	Pepper Grass,	4
Savoy Cabbage,	6	Parsley,	4
Red Cabbage,	6	Saffron,	4
Cauliflower Cabbage,	6	Burnet,	4
Early Frame Pease,	6	Rue,	4
Early Hotspur Pease,	6		

dec. 7

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